Course Syllabus OCE 3016: 2013

Introduction to Coastal and Oceanographic Engineering

Instructor: Andrew Lapetina
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-Phone Number: 518-209-4278 (Please call only, not text)
-Office: Weil 546 (I have an espresso & cappuccino machine, so bring a mug)
Office Hours Location: Weil 575 D (Subject to change to Weil 546)
Office Hour Time: TBD
Meeting Times: MWF, Period 5 (11:45-12:35)
Meeting Location: Weil 234

Course Objectives

-Provide you with a basic understanding of coastal processes
-Impart you with a few valuable transferrable quantitative skills

Schedule of Topics Covered

1) Surface Waves
2) Tides
3) Momentum of Fluids
4) Wave Breaking
5) Ocean Currents
6) Coriolis Effects
7) Global Warming and the Ocean
8) Estuaries
9) Coastal Wetlands
10) Marine Spatial Planning
11) Beach Erosion and Nourishment
12) River-Ocean Connectivity
13) Marine Energy Technology
14) Glaciology
15) Whatever interests you!

Field and Laboratory Trips

There will be one class trip to the Coastal Laboratory, located on SW 6th street. This will be within the first 3 weeks of the semester, and will be during class time. Additionally, there will be one field trip to a coastal landscape, ideally Cedar Key. This field trip will take one full day, and will likely be in mid-late November. Attendance at neither is mandatory, but important to understanding class material.

Requirements

-Project/Paper 40%

You will be expected to complete a project or paper on some topic of your choosing, as long as it relates to coastal and oceanographic engineering. The due date is midnight on Monday, December 2nd.

To ensure quality topics, you must complete **one** of the following preparatory steps:

1) By October 1st, hand in a proposal for your project, this proposal should be two pages in length, and describe what you plan to examine and how you plan to examine it.

2) Schedule a 20-30 minute meeting with me between September 23rd and October 4th to discuss your topic in detail. Please bring some relevant information on your proposed project in either digital or hardcopy form. Email me to schedule a time and date.

This preparatory step will constitute 10% of your grade for the paper. We will discuss possibilities throughout the course. The content of your project or paper should be 6-10 pages, including figures if necessary.

-Homework and Quizzes 40%

Homework will primarily involve the use of Excel or some similar spreadsheet program. Guidance on how to use spreadsheet software efficiently will be provided in class on several occasions. While the point of the class is not to learn how to use spreadsheets, one goal is to impart valuable transferable quantitative skills. All homework will be due at the end of the class meeting on its due date.

Quizzes will generally be 5 minutes long at the very beginning of class, and will ask you to provide information on assigned out-of-class resources. Out of class resources will include podcasts, Youtube videos, and TED talks.

-Final Exam 20%

There will be a final exam near the end of November. More information on this will be forthcoming.

Late Work Policy

With the exception of the class project, extensions will be readily provided for every assignment. However, extensions must be requested 8 hours prior to the time the assignment is due. If an extension is not requested, no credit will be awarded for late assignments.

Class Attendance Policy

Class attendance is not mandatory, however Powerpoint files of lecture notes will not be provided electronically by default. If you would like any class notes, please email me and they will be provided.

If you need to reschedule an exam or quiz, please contact me as early as possible.

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

Texts

There are no required textbooks, however, some useful reference texts are:

Dean, Robert G. and Robert A. Dalyrymple. *Water Wave Mechanics for Engineers and Scientists.* Hackensack, NJ: World Scientific Publishing, 2008.

Dean, Robert G. and Robert A. Dalyrymple. *Coastal Processes with Engineering Applications.* New York, NY: Cambridge University Press, 2002.
Mellor, George L. *Introduction to Physical Oceanography.* New York, NY: Springer Publishing, 1996.

There is no need to purchase these textbooks; if you would like to purchase them, please contact Andy on how to get inexpensive used copies.

Grading

Final Grades will be done in accordance with University policy found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx
Projected Grades:

Maximum %	Minimum %	Grade
100	94	A
94	90	A-
89	86	B+
85	83	B
82	80	B-
79	76	C+
75	73	C
72	70	C-
69	50	D

All work must be completed in accordance with the University's Academic Honesty Policy.

UF Counseling Services

Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- University Counseling Center, 301 Peabody Hall, 392-1575, Personal and Career Counseling.

- SHCC mental Health, Student Health Care Center, 392-1171, Personal and Counseling.- Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling.

- Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.